BULLETIN

DECEMBER 1963

VOL. 46 NO. 4

GENERAL BULLETIN 698

PENNSYLVANIA DEPARTMENT of AGRICULTURE

# SEED ANALYSIS REPORT

## 1963

COMMONWEALTH OF PENNSYLVANIA

WILLIAM W. SCRANTON, GOVERNOR

DEPARTMENT OF AGRICULTURE

LELAND H. BULL, SECRETARY

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## OUR COVER

The official symbol of the Pennsylvania Crop Improvement Association. This symbol points out the very important fact, that Certified Seed is the result of joint cooperation of a number of groups.

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Commonwealth of Pennsylvania
**Department of Agriculture**
Bureau of Plant Industry

# Seed Analysis Report—1963

**Wendell P. Ditmer**
***Seed Control Officer***

The Pennsylvania Seed Act is essentially a law to regulate the labeling of agricultural and vegetable seeds that are offered or exposed for sale in the Commonwealth. The majority of people, when they buy a product of any kind, take into consideration the quality. This should also be true when buying seed. The seed label is a sure way of telling the quality of the seed, especially if it is certified seed.

The fundamental purpose of seed certification is to improve the yield and quality of field crops produced on farms in the State. Seed certification is designed to maintain genetic purity of superior crop varieties and other high seed standards to insure satisfactory performance of the resultant crop.

In the ordinary distribution of commercial seed the buyer accepts the information indicated on the tag as to variety and source while with certified seed the variety and origin can be traced back to the producer. Field inspection of the growing crop, sampling, laboratory analysis and proper labeling of the seed is the best assurance of good quality seed of known purity and heredity. Certified seed doesn't cost—it pays.

Each year in the enforcement of the Seed Act, inspectors visit seed vendors throughout the State. Seed that is offered for sale is examined for proper labeling requirements and samples are drawn for examination and testing in the Seed Laboratory. This report is a summary of the activities of the Seed Control Program from October 1, 1962 to September 30, 1963.

During the inspection program, lots of seed that are incorrectly labeled are placed under a "Stop Sale" until correctly labeled or destroyed. Lots of seed that are tested in the seed laboratory and found to be mislabeled are also placed under "Stop Sale." During the inspection period covered by this report a total of 895 lots of seed were placed under "Stop Sale" for various reasons. Four vendors were prosecuted for failure to comply with "Stop Sale" orders.

During the period covered by this report inspectors collected the following number of samples:

1176 samples of agricultural seed, of which 10.4% were illegal for sale;
152 samples of mixtures of agricultural seeds, of which 36.8% were illegal for sale;
665 samples of vegetable seed, of which 4.9% were illegal for sale.

A comparison of seed violations for the past three years is as follows:

| | 1963 | 1962 | 1961 |
|---|---|---|---|
| Agricultural Seeds | 10.4% | 16.3% | 14.0% |
| Mixtures of Agricultural Seeds | 36.8% | 46.2% | 22.9% |
| Vegetable Seeds | 4.9% | 5.5% | 7.8% |

Tables I, II, and III mention technical violations and Table IV has them listed by companies. The following are considered technical violations in this report: Not using complete kind names; improper terms for variety names; use of improper labeling terms; use of abbreviations of kind and variety names; illegal treatment tags; illegible tags; analysis not totaling 100%; and lack of required information, such as: lot number, origin when required, terms "mixed" or "mixture" for mixtures, and name and address. A lot of seed sampled at the wholesale level and in violation of the law was classified as a technical violation, if relabeled.

## Summary of Seed Laboratory Work

Classification of the samples for which tests were completed and the total number of laboratory tests involved are listed in the following summary:

| Number of Samples | Kinds | Purity | NUMBER OF TESTS Noxious Weed Examinations | Germination |
|---|---|---|---|---|
| 2678 | Agricultural Seeds | 942 | 2052 | 2710 |
| 860 | Vegetable Seeds | 12 | 6 | 924 |
| 201 | Mixtures (710 components) | 164 | 165 | 582 |
| 15 | Tree Seeds | | 11 | 15 |
| 29 | Flower Seeds | | | 29 |
| 39 | Checked for labeling only | | | |
| 3822 | Totals | 1118 | 2234 | 4260 |

The 4260 germination tests include 203 fluorescence tests made on ryegrass samples. The Seed Laboratory also made 687 additional tests: interstate noxious weed examinations; embryo excision; moisture tests and test weights. Thus making a total of 8299 various tests made in the laboratory.

The facilities of the Seed Laboratory are available to Pennsylvania farmers, home owners, seedsmen and other State Departments, who submitted 1828 samples for testing. Of this number 145 were Drill Box Survey samples submitted by the Agronomy Extension Department of the Pennsylvania State University (Table VI) and 175 were samples from other State Departments. The Certification Officer submitted 242 samples for examination and germination.

## General Information For Seed Vendors

Carry over lots of seed to be sold must be retested and relabeled within a nine month period. The person or dealer upon whose premises seeds are located is held responsible for all labeling requirements. All seed must be properly labeled regardless of the size of the lot or container.

If you are not positive that your labeling meets the requirements of the Seed Act or you would like a copy of the Pennsylvania Seed Act and the Rules and Regulations under the Act, write to the Seed Laboratory, Bureau of Plant Industry, Department of Agriculture, Harrisburg, Pennsylvania.

# TABLE I

## Agricultural Seeds in Violation of the Seed Act

One thousand, one hundred and seventy-six official samples of agricultural seeds (not including mixtures) were analyzed in the Seed Laboratory. This table lists the nature of the serious violations. Seventy-five lots of seed were found to be in technical violation of the law, or in violation at the wholesale level; these have been relabeled or destroyed. These violations are not listed in this table but are recorded in Table IV.

The listing of both wholesaler and retailer does not imply a judgment of guilt against one or the other. The vendor of the seed, usually the retailer, is legally responsible for its condition, but the retailer cannot be justly blamed in all cases of mislabeling. Wholesalers name is in boldface type. Laboratory number is in parenthesis after the remarks and source of seed.

| Kind of Seed<br>Lot No. | Remarks and Source of Seed<br>(Wholesaler & Retailer) |
|---|---|
| Timothy<br>6251 | Contains noxious weed seeds, none labeled. **Clair Apger & Son**; Nickle Plate Mill, Erie, Pa. (A631568) |
| Bluegrass,<br>Kentucky<br>K-3-63 | Labeled 10.00% inert matter, found 13.73%. **Atlantic Seed Co.**; Butch's Discount Market, R.D. Trevose, Pa. (A631558) |
| Oats,<br>Clintland 60 Cert.<br>CL-19 | Contains noxious weed seeds, none labeled. **Beachley-Hardy Seed Co.**; Mundis Mills, R.D. York, Pa. (A630926) |
| Ryegrass<br>Annual<br>I4298-C | This is a mixture of perennial and annual ryegrass. **Beachley-Hardy Seed Co.**; H. P. Whitenight, Bloomsburg, Pa. (A630966) |
| Timothy<br>Climax, Cert.<br>XT2-1369 | Contains prohibited weed seeds. **Beachley-Hardy Seed Co.**; Kinter Milling Co., Meshoppen, Pa. (A631366) |
| Oats<br>Clintland 60, Cert.<br>CL-18 | Contains noxious weed seeds, none labeled. **Beachley-Hardy Seed Co.**; R. C. Schuchart, New Freedom, Pa. (A631387) |
| Timothy<br>T-1853 | Contains noxious weed seeds, none labeled. **Carlton Seed Co.**; Seems Seed Farms, Emmaus, Pa. (A631950) |
| Timothy<br>Climax, Cert.<br>66-538 | Contains noxious weed seeds, none labeled. **Craver-Dickinson Seed Co.**; Ivan Hugo Feeds, New Albany, Pa. (A631776) |
| Red Clover<br>CR95-12 | Contains noxious weed seeds, none labeled. A mixture of red and alsike clovers. **Dewine & Hamma Seed Co.**; Seems Seed Farms, Emmaus, Pa. (A630654) |
| Reed Canary Grass<br>3946-2 | Labeled .25% weed seeds, found .91%. **Dewine & Hamma Seed Co.**; Seems Seed Farms, Emmaus, Pa. (A630655) |
| Oats,<br>Clintland<br>3010 | Contains prohibited weed seeds. Contains noxious weed seeds, none labeled. **Eastern States Farmers Exchange Inc.**; M. Arthur Deihl, Shippensburg, Pa. (A630798) |
| Brome grass<br>Smooth<br>3849 | Labeled 83% germination, found 57%. **Eastern States Farmers Exchange, Inc.**; Eastern States, Danville, Pa. (A631191) |

# TABLE I

## Agricultural Seeds in Violation of the Seed Act

| Kind of Seed Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| Timothy 3191 | Contains prohibited weed seeds. **Eastern States Farmers Exchange, Inc.**; Eastern States, Indiana, Pa. (A631688) |
| Barley Wong 3476 | Labeled .90% germination, found 73%. **Eastern States Farmers Exchange, Inc.**; Eastern States, Uniontown, Pa. (A631899) |
| Barley Wong 3480 | Labeled 92% germination, found 65%. **Eastern States Farmers Exchange, Inc.**; Eastern States, Nescopeck, Pa. (A631906) |
| Bluegrass Merion Kentucky S612/A | This is a mixture of Merion Kentucky bluegrass and Kentucky bluegrass. **A. Ertag, Inc.**; Homer Uhler, Paoli, Pa. (A631446) |
| Timothy PB1862 | Contains noxious weed seeds, none labeled. **G. L. F. Exchange, Inc.**; G. L. F. Service, Berwick, Pa. (A630971) |
| Orchard grass WB115 | Labeled .03% crop seed, found 1.47%. **G. L. F. Exchange, Inc.**; Audley Lott Mill, S. Montrose, Pa. (A631291) |
| Brome grass Smooth PB-50 | Labeled 80% germination, found 67%. **G. L. F. Exchange, Inc.**; G. L. F. Service, Springville, Pa. (A631302) |
| Alsike Clover N-2625 | Contains prohibited weed seeds. **G. L. F. Exchange, Inc.**; G. L. F. Service, Sugarloaf, Pa. (A631364) |
| Trefoil Viking, Cert. P-1028 | Trefoil is not a complete kind name. Contains noxious weed seeds, none labeled. **G. L. F. Exchange, Inc.**; G. L. F. Service, Westfield, Pa. (A631510) |
| Bluegrass Merion Kentucky W2903 | This is a mixture of Merion Kentucky bluegrass and Kentucky bluegrass. Merion labeled 82% germination, 69% found. **G. L. F. Exchange, Inc.**; G. L. F. Service, Wellsboro, Pa. (A631518) |
| Orchard grass S-37 WB-332 | Labeled .05% inert matter, found 6.75%. **G. L. F. Exchange, Inc.**; Mase & Schanbaker, Liberty, Pa. (A631583) |
| Timothy Solar Brand 9381 | Contains prohibited weed seeds. **Henry Hirsch & Sons, Inc.**; Juniata Roller Mills, Thompsontown, Pa. (A631394) |
| Eureka Insilage 8490 | Kind name must be given (corn). Labeled 76% germination, found 62%. **Hoffman Seed & Grain Co.**; Altmans Cash Feed Store, Canonsburg, Pa. (A630770) |
| Ryegrass Perennial 14-62AP | Labeled .03% weed seed, found .52%. **Loft Pedigreed Seed Co.**; Ardent Nurseries, Lansdale, Pa. (A632004) |
| Timothy T-838 | Contains noxious weed seeds, none labeled. **Ohio Seed Co.**; Best Feed & Farm Supplies, Latrobe, Pa. (A630709) |
| Alfalfa Grimm A-913 | Labeled 60%-30% germination and hard seed, found 68%-9%. **Ohio Seed Co.**; Diamond Milling Co., New Brighton, Pa. (A630737) |

# TABLE I

## Agricultural Seeds in Violation of the Seed Act

| Kind of Seed Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| Timothy T-519 | Labeled 80% germination, found 62%. **Ohio Seed Co.**; Valley Feed & Lawn Supply, Sharpsville, Pa. (A631799) |
| Alfalfa Williamsburg A-834 | Noxious weed seeds exceeds that stated. **Ohio Seed Co.**; E. L. M. Feed Store, Greencastle, Pa. (A631850) |
| Timothy T1992 | Noxious weed seeds exceeds maximum allowed. **Ohio Seed Co.**; Mays Seed Co., Womelsdorf, Pa. (A632022) |
| Barley Dayton, Cert. 502 | Labeled .20% inert matter, found 1.69%. **Ohio & Michigan Seed Co.**; Diamond Milling Co., New Brighton, Pa. (A631931) |
| Timothy 2014 | Contains noxious weed seeds, none labeled. **Oliger Seed Co.**; E. F. Sphar Feed Store, Roscoe, Pa. (A631127) |
| Trefoil Birdsfoot BXA | Labeled 75%-10% germination and hard seed, found 63%-10%. **Ontario Seed Cleaners**; Beachley-Hardy Seed Co., Camp Hill, Pa. (A630256) |
| Orchard grass 1411 | Labeled .22% crop seed, found 1.01%. **Pa. Farm Bureau Co-op. Ass'n.**; Farm Bureau, Newville, Pa. (A630813) |
| Alfalfa Buffalo Cert. D336 | Labeled 80%-5% germination and hard seed, found 63%-5%. **Philadelphia Seed Co.**; Walter K. Long, Inc., Center Valley, Pa. (A631255) |
| Bluegrass Merion Kentucky 61M1 | This is a mixture of Merion Kentucky bluegrass and Kentucky bluegrass. No test date given. **Round Butte Seed Growers, Inc.**; Mock Seed Co., Pittsburgh, Pa. (A630426) |
| Bluegrass Kentucky 11322 | Labeled 96.00% pure seed and 3.40% inert matter, found 87.74% and 11.49%. **Wm. G. Scarlett & Co.**; Seems Seed Farms, Emmaus, Pa. (A630658) |
| Timothy 11038 | Labeled 85% germination, found 64%. **Wm. G. Scarlett & Co.**; Kreutz Creek Valley Farmers Co-op. Ass'n., R.D. York, Pa. (A630920) |
| Timothy 11733 | Contains prohibited weed seeds. **Wm. G. Scarlett & Co.**; Stewartstown Milling Co., Stewartstown, Pa. (A631938) |
| Timothy 4414 | Contains prohibited weed seeds. **Wm. G. Scarlett & Co.**; Anderson Bros., New Park, Pa. (A631980) |
| Barley Wong 11771 | Noxious weed seeds exceeds maximum allowed. **Wm G. Scarlett & Co.**; Starner Grain & Feed Co., Hampton, Pa. (A632016) |
| Timothy 11773 | Contains prohibited weed seeds. **Wm. G. Scarlett & Co.**; Starner Grain & Feed Co., Hampton, Pa. (A632017) |
| Bluegrass Kentucky 51-441 | Labeled 85.40% pure seed and 14.05% inert matter, found 81.20% and 18.65%. **Seaboard Seed Co.**; Canonsburg Milling Co., Canonsburg, Pa. (A631163) |

# TABLE I

## Agricultural Seeds in Violation of the Seed Act

| Kind of Seed Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| Timothy 300-485 | Contains noxious weed seeds, none labeled. Labeled 87% germination, found 54%. **Seaboard Seed Co.**; Gregory Bros., Weatherly, Pa. (A631368) |
| Timothy 4459 | Contains prohibited weed seeds. **Seaboard Seed Co.**; Graham Division, The Summers Fertilizer Co., Somerset, Pa. (A631990) |
| Vetch Winter Hairy 3000 | Contains noxious weed seeds, none labeled. **Stanford Seed Co.**; H. Rockwell & Son, Canton, Pa. (A631305) |
| Fescue Chewings FC3322 | Labeled 65% germination, found 34%. **Altmans Cash Feed Store**, Pittsburgh, Pa. (A630741) |

# TABLE II

## Mixtures of Seeds in Violation of the Seed Act

One hundred and fifty-two official samples of mixtures of agricultural seeds were analyzed or checked for labeling in the Seed Laboratory. This table lists the nature of the serious violations. Thirty-two mixtures were found to be in technical violation of the law, or in violation at the wholesale level; these have been relabeled or destroyed. These violations are not listed in this table but are recorded in Table IV.

The listing of both wholesaler and retailer does not imply a judgment of guilt against one or the other. The vendor of the seed, usually the retailer, is legally responsible for its condition, but the retailer cannot be blamed in all cases of mislabeling. Wholesaler's name is in boldface type. Laboratory number is in parenthesis after the remarks and source of seed.

| Name of Mixture Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| All Purpose Grass Seed Mixture 3098 | Labeled .00% crop seed, found .91%. **Aimcee Wholesale Corp.**; Joseph Horne Co., Natrona Heights, Pa. (A631471) |
| Spot-Remover Mixture T-S | Labeled .35% crop seeds, found 3.75%. Labeled 80% germination for Highland Colonial Bentgrass, found 58%. **Atlantic Seed Co.**; Nichols Discount City, Lancaster, Pa. (A631601) |
| Laurel Park Lawn Seed Mixture LP-331 | Labeled 2.89% inert matter, found 4.83%. Germination percentage of all ingredients less than stated. **Beachley-Hardy Seed Co.**; Burry Warehouse, Lewisburg, Pa. (A631211) |
| Clover Seed Mixture 8398-21 | Labeled .50% inert matter, found 1.06%. Labeled 73.24% pure small hop clover, found 56.75%. Labeled 23.26% pure white clover, found 41.46%. When hard seeds are present the percentage must be listed. **Cover Lawn Seed Co.**; Kelly & Cohen, Natrona Heights, Pa. (A631472) |
| Timothy, Clover & Alsike Mixture 66X33 | "Alsike" is not a complete kind name, it should be alsike clover. Red clover labeled Idaho grown, contained Canadian origin seed. **Craver-Dickinson Seed Co.**; Burger & O'Brien Milling Co., Waterford, Pa. (A631570) |
| Druid Hill Park #51 Mixture D64 | Labeled 5.00% crop seed, found 6.93%. Labeled 70% germination for timothy, 50% found. White clover seed present none labeled. **Druid Hill Park Seed Corp.**; Acme Markets, Carlisle, Pa. (A630961) |
| Village Green Grass Seed Mixture 1922 | Labeled 35.67% pure Italian ryegrass, found 10.08%. Labeled 5.39% pure perennial ryegrass, found 28.21%. **Excel Seed Co.**; Peoples Drug Store, Camp Hill, Pa. (A631464) |
| Ivy Green Grass Seed Mixture 10-63? | Analysis label not completely legible. Labeled 70% germination for creeping red fescue, found 57%. **Flower Lane Farm**; Woolworths, Harrisburg, Pa. (A631547) |
| 100% Perennial Cambridge Park Grass Seed Mixture L81-2032-P | Misleading labeling—package states it is a mixture but analysis says it is perennial ryegrass. Labeled 98.50 pure perennial ryegrass, found 49.27%. Found 49.90 pure annual ryegrass. **Flower Lane Farm**; Butch's Discount Market, Trevose, Pa. (A631597) |

# TABLE II

## Mixtures of Seeds in Violation of the Seed Act

| Name of Mixture Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| Heritage House Delux Grass Seed Mixture 3-042 | Contains noxious weed seeds, none labeled. Abbreviations are not permissible. **Heritage House Products, Inc.**; John Brown & Son, Ellwood City, Pa. (A631277) |
| Fabulawn Special Mixture 6301 | Labeled .50% crop seed, found 1.59%. Labeled 39.60% pure Italian ryegrass, found 30.13%. Labeled 29.40% pure perennial ryegrass, found 41.20%. **Lawn & Grass Seed, Inc.**; Albert's, Glenshaw, Pa. (A631468) |
| Lofts Popular Mixed Grass LP-635 | Labeled 80% germination for Kentucky bluegrass, found 69%. Labeled 75% germination for Merion Kentucky bluegrass, found 53%. **Loft Pedigreed Seed Co.**; Pine Run Farm Supply, Horsham, Pa. (A630894) |
| Lofts Marvelgreen Mixed Grass MG1-63 | Labeled .33% crop seed, found 1.40%. Labeled 19.60% pure perennial ryegrass, found 6.86%. Labeled 19.60 pure Italian ryegrass found 32.58%. **Loft Pedigreed Seed Co.**; Pine Run Farm Supply, Horsham, Pa. (A630895) |
| Emeral Green Special Mixture L15462 | Labeled .09% crop seed, found .83%. **The Page Seed Co.**; Hershey General Store, Christiana, Pa. (A630892) |
| Fastgro, Special Mixture L15263 | Labeled .30% crop seed, found 2.54%. **The Page Seed Co.**; Woods Farm Supply, Athens, Pa. (A631370) |
| Challenger Grass Seed Mixture 19518 | Labeled 29.70% pure annual ryegrass, found 49.56%. Labeled 24.50 pure perennial ryegrass, found 8.50%. **Wm. G. Scarlett & Co.**; Millers Auto Supply, Harrisburg (A631465) |
| Growfast Lawn Seed Mixture 2-131 | Labeled 75% germination for creeping red fescue, found 22%. **Walter S. Schell, Inc.**; Otto's Hardware, Mt. Holly Springs, Pa. (A630963) |
| Grass Seed Mixture 2189-1 | Labeled 45.39% pure Kentucky bluegrass, found 36.88%. Labeled 51.03% pure Festuca spp. (Chewings and creeping red fescue), found 60.50%. **O. M. Scott & Son**; W. J. Harper & Sons, Monaca, Pa. (A631544) |
| Grass Seed Mixture 208 | Labeled 1.00% crop seed, found 2.47%. **John M. Shawvan Co.**; J. A. Williams Co., Pittsburgh, Pa. (A631546) |
| Velvet Green 31164 | Labeled 90% germination for Festuca spp. (Creeping and Pennlawn red fescue), found 77%. Word "mixture" or "mixed" is required information. **United Seeds, Inc.**; Eastern States, York, Pa. (A630900) |
| Top of the Line Lawn Seed Mixture 273 | Labeled .00% crop seed, found 1.26%. **Vaughn's Seed Co.**; Thorofare Super Market, Pittsburgh, Pa. (A631280) |

# TABLE II

## Mixtures of Seeds in Violation of the Seed Act

| Name of Mixture Lot No. | Remarks and Source of Seed (Wholesaler & Retailer) |
|---|---|
| Mundis Mills Green Lawn Seed Mixture 63-3 | Labeled .15% crop seed, found 2.86%. Labeled .90% inert matter, found 3.72%. Germination percentage of all ingredients less than stated. Labeled 29.60% pure Kentucky bluegrass, found 16.20%. Labeled 24.90% pure Pennlawn fescue, found 14.50%. Tall fescue found none labeled. Mundis Mills, Inc., York, Pa. (A630898) |
| Mundis Mills Green Lawn Seed Mixture 63-4 | Labeled .15% crop seed, found 4.64%. Labeled .90% inert matter, found 2.57%. Mundis Mills, Inc., York, Pa. (A631523) |

# TABLE III

## Vegetable Seeds in Violation of the Seed Act

Six hundred and sixty-five official samples of vegetable seeds were received and tested in the Seed Laboratory. This table includes only those samples that were found to be in serious violation of the Seed Act. Fourteen samples were found to be in technical violation of the law or in violation at the wholesale level; these have been relabeled or destroyed. These violations are not listed in this table but are recorded in Table IV.

The wholesaler's name in all instances and the germination for those samples of seed found below standard are in boldface type. Samples, for which the found germination is not in boldface, are in violation for some other reason as indicated at the end of the table.

| Lab. No. | Kind | Source of Seed<br>Variety | Given<br>Germ. | Given<br>Date | Found<br>Germ. | Stand-ard |
|---|---|---|---|---|---|---|
| | | **Asgrow Seed Co.**<br>Butler Farm Bureau, Saxonburg, Pa. | | | | |
| A630749 | Beet | Detroit Dark Red | 65 | 1/63 | **56** | 65 |
| | | Farm Bureau, Newville, Pa. | | | | |
| A630811 | Lima Beans | Fordhook | 84 | 1963 | **41** | 70 |
| | | **Robert Buist Co.**<br>Reilly Bros. & Raub, Lancaster, Pa. | | | | |
| A630952 | Beans | Lazy Wife Pole | | 1963 | **9** | 75 |
| | | **W. Atlee Burpee Co.**<br>Cooks Garden Center, Harrisburg, Pa. | | | | |
| A631441 | Squash | Table Queen | 80 | 12/62 | **66** | 75 |
| | | Martins Hardware, Leola, Pa. | | | | |
| A631442 | Lima Beans | Baby Fordhook | 85 | 3/63 | **51** | 70 |
| | | **Eastern States Farmers Exch.**<br>Eastern States, York, Pa. | | | | |
| A630917 | Lettuce | Great Lakes R200 V-338 | 80 | 12/62 | **0** | 80 |
| | | Eastern States, Carlisle, Pa. | | | | |
| A630985 | Lettuce | Great Lakes R200 V-338 | 80 | 12/62 | **1** | 80 |
| | | Eastern States, Lebanon, Pa. | | | | |
| A631049 | Lettuce | Great Lakes R200 V-338 | 80 | 12/62 | **0** | 80 |
| | | Eastern States, East Butler | | | | |
| A631484 | Lima Beans | Fordhook 242 V-608 | | 1963 | **59** | 70 |
| | | **Walter S. Schell, Inc.**<br>Otto's Hardware, Mt. Holly Springs, Pa. | | | | |
| A630825 | Corn | Golden Beauty Sweet | | 1963 | **64** | 75 |
| | | Geo. M. Zerfing Hardware, Gettysburg, Pa. | | | | |
| A630877 | Lettuce | Prizehead | | 1963 | **4** | 80 |

# TABLE III

## Vegetable Seeds in Violation of the Seed Act

| Lab. No. | Kind | Source of Seed<br>Variety | Given<br>Germ. | Given<br>Date | Found<br>Germ. | Stand-<br>ard |
|---|---|---|---|---|---|---|
| | | Cochran & Allen Hardware, Carlisle, Pa. | | | | |
| A631000 | Beans | Lazy Wife | | 1963 | 14 | 75 |
| | | Wilhelm Hardware, Myerstown, Pa. | | | | |
| A631052 | Lettuce | Crisp as Ice | 81 | 11/62 | 21 | 80 |
| | | **Sears, Roebuck & Co.** | | | | |
| | | Sears, Roebuck & Co., Pittsburgh, Pa. | | | | |
| A631147 | Lettuce | Great Lakes | 80 | 1/63 | 66 | 80 |
| | | **Independents** | | | | |
| | | E. M. Goss, Mifflin, Pa. | | | | |
| A631095 | Cucumber | Davis Perfect | | 1963 | 67 | 80 |
| | | George Rome, Inc., Carnegie, Pa. | | ** | | |
| A631538 | Onion | Sweet Spanish | 83 | 11/61 | 16 | 70 |
| | | Seidels Dept. Store, Washingtonville, Pa. | | | | |
| A631423 | Parsley | * | | 1963 | 10 | 60 |
| | | York Paint & Hardware Co., Inc., York, Pa. | | | | |
| A630918 | Watermelon | New Hampshire Midget | 80 | 11/62 | 58 | 70 |
| | | Zarfoss Hardware Co., Dallastown, Pa. | | | | |
| A630923 | Onion | White Globe | 90 | 10/62 | 65 | 70 |

*Required information not given
**Illegal test date

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| Abbott & Cobb<br>Philadelphia, Penna. | .. | .. | .. | .. | .. | .. | 12 | .. | 1 |
| Agricultural Development Corp.<br>Shiremanstown, Penna. | .. | .. | .. | 4 | .. | .. | .. | .. | .. |
| Aimcee Wholesale Corp.<br>New York, New York | .. | .. | .. | .. | 1 | .. | .. | .. | .. |
| Alexander Seed Farms<br>State College, Penna. | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Allied Seed Co.<br>Fort Wayne, Indiana | 5 | .. | .. | .. | .. | .. | .. | .. | .. |
| American Seed Co.<br>Lancaster, Penna. | .. | .. | .. | .. | .. | .. | 12 | .. | .. |
| Clair Apger & Son<br>Newton Falls, Ohio | .. | 1 | .. | .. | .. | .. | .. | .. | .. |
| Arnold-Thomas Seed Service<br>Fresno, California | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Asgrow<br>Milford, Connecticut | 1 | .. | .. | .. | .. | 2 | 68 | 2 | .. |
| Atlantic Seed Co.<br>Jersey City, New Jersey | 2 | 1 | .. | .. | 1 | 1 | .. | .. | .. |
| Barzen of Minneapolis, Inc.<br>Minneapolis, Minnesota | 2 | .. | .. | .. | .. | .. | .. | .. | .. |
| Bausher & Teman<br>Allentown, Penna. | 5 | .. | .. | .. | .. | .. | .. | .. | .. |
| Beachley-Hardy Seed Co.<br>Camp Hill, Pa. | 143 | 4 | 8 | 5 | 1 | 1 | .. | .. | .. |
| Benton-Kirby, Inc.<br>Milwaukee, Wisconsin | .. | .. | .. | .. | .. | .. | 4 | .. | .. |
| Better Seed Co.<br>Pittsburgh, Penna. | .. | .. | .. | 1 | .. | .. | 19 | .. | .. |
| Bonnie Green Products Co.<br>Philadelphia, Penna. | 1 | .. | .. | 2 | .. | 2 | .. | .. | .. |
| Buchanan-Cellers Grain Co.<br>McMinnville, Oregon | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Robert Buist Seed Co.<br>Philadelphia, Penna. | .. | .. | 1 | .. | .. | .. | 18 | 1 | .. |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| W. Atlee Burpee Co. Philadelphia, Penna. | .. | .. | .. | .. | .. | .. | 81 | 2 | 2 |
| Carlton Seed Co. Hanover, Penna. | 44 | 1 | 3 | 1 | .. | 1 | .. | .. | .. |
| Casterline & Sons Seeds, Inc. Dodge City, Kansas | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Alf. Christianson Seed Co. Inc. Mount Vernon, Washington | .. | .. | .. | .. | .. | .. | 1 | .. | .. |
| Corneli Seed Co. St. Louis, Missouri | .. | .. | .. | .. | .. | .. | 6 | .. | .. |
| Cover Lawn Seed Co. Baltimore, Maryland | .. | .. | .. | 1 | 2 | .. | .. | .. | .. |
| Craver-Dickinson Seed Co. Buffalo, New York | 2 | 1 | .. | .. | 1 | .. | .. | .. | .. |
| Crossman Seed Corp. East Rochester, New York | .. | .. | .. | .. | .. | .. | 16 | .. | .. |
| Cumberland Valley Co-op. Ass'n. Shippensburg, Penna. | 4 | .. | .. | .. | .. | .. | .. | .. | .. |
| Deane Seed Co. Wethersfield, Connecticut | .. | .. | .. | .. | .. | .. | 3 | .. | .. |
| DeKalb Agricultural Ass'n., Inc. DeKalb, Illinois | 6 | .. | .. | .. | .. | .. | .. | .. | .. |
| Dessert Seed Co., Inc. El Centro, California | .. | .. | .. | .. | .. | .. | 3 | .. | .. |
| Dewine & Hamma Yellow Springs, Ohio | 10 | 2 | 1 | .. | .. | .. | .. | .. | .. |
| T. A. Doebler & Son Jersey Shore, Penna | 7 | .. | .. | .. | .. | .. | .. | .. | .. |
| Druid Hill Park Seed Co. Baltimore, Maryland | .. | .. | .. | .. | 1 | .. | 2 | .. | .. |
| E. I. DuPont de Nemours & Co. Inc. Wilmington, Delaware | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Eastern Seed Co. Jersey City, New Jersey | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Eastern States Farmers Exch. West Springfield, Mass. | 62 | 5 | 1 | .. | .. | .. | 50 | 4 | 2 |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| A. Ertag, Inc.<br>Jersey City, New Jersey | 7 | 1 | 1 | .. | .. | .. | .. | .. | .. |
| Excel Seed Co.<br>Downers Grove, Illinois | .. | .. | .. | .. | 1 | .. | .. | .. | .. |
| Farmcraft Seed Co., Inc.<br>Oxford, Indiana | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Ferry-Morse Seed Co.<br>Buffalo, New York | .. | .. | 1 | .. | .. | .. | 30 | .. | .. |
| Flower Lane Farm<br>Martinsville, New Jersey | .. | .. | .. | 1 | 2 | .. | .. | .. | .. |
| Forestry Associates<br>Allentown, Penna. | 6 | .. | .. | .. | .. | .. | .. | .. | .. |
| Fredonia Seed Co.<br>Fredonia, New York | .. | .. | .. | 2 | .. | 1 | 22 | .. | .. |
| Edward J. Funk & Son<br>Kentland, Indiana | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Garfield Williamson<br>Jersey City, New Jersey | .. | .. | 1 | .. | .. | .. | .. | .. | .. |
| L. A. Green Seed Co.<br>Portland, Oregon | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Jonathan Green & Sons<br>Kearney, New Jersey | .. | .. | .. | .. | .. | 1 | .. | .. | .. |
| Co-op G.L.F. Exchange, Inc.<br>Buffalo, New York | 57 | 7 | 4 | 1 | .. | 2 | 2 | .. | .. |
| Gries Seed Farms, Inc.<br>Fremont, Ohio | .. | .. | 4 | .. | .. | .. | .. | .. | .. |
| Hart Seed Co.<br>Wethersfield, Connecticut | .. | .. | .. | .. | .. | .. | 4 | .. | .. |
| Louis Hahn & Son<br>Pittsburgh, Penna. | .. | .. | .. | 2 | .. | .. | .. | .. | .. |
| Heritage House Products, Inc.<br>Philadelphia, Penna. | .. | .. | .. | 4 | 1 | .. | .. | .. | .. |
| Henry Hirsch & Sons, Inc.<br>Toledo, Ohio | 7 | 1 | .. | .. | .. | .. | .. | .. | .. |
| A. H. Hoffman, Inc.<br>Landisville, Penna. | 105 | .. | 2 | .. | .. | .. | .. | .. | .. |

# TABLE IV

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| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| Hoffman Seed & Grain Co. Muncy, Penna. | 4 | 1 | 1 | .. | .. | .. | .. | .. | .. |
| Holler & Co. Inc. Rocky Ford, Colorado | .. | .. | .. | .. | .. | .. | 1 | .. | .. |
| Home and Garden Products, Inc. New York, New York | .. | .. | .. | .. | .. | 3 | .. | .. | .. |
| Independents | 25 | 1 | 9 | 1 | 2 | .. | 12 | 5 | .. |
| Independence Hall Seed Co. Baltimore, Maryland | .. | .. | .. | 3 | .. | .. | .. | .. | .. |
| Ken-Bris Farms, Inc. Philadelphia, Pa. | .. | .. | .. | 3 | .. | 1 | .. | .. | .. |
| S. S. Kresge Co. Detroit, Michigan | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| D. Landreth Seed Co. Philadelphia, Penna. | .. | .. | .. | 3 | .. | 2 | 22 | .. | 1 |
| Lawn & Grass Seeds, Inc. Buffalo, New York | .. | .. | .. | 1 | 1 | 1 | .. | .. | .. |
| Lawn Products Co. Philadelphia, Penna. | .. | .. | .. | 4 | .. | .. | .. | .. | .. |
| The Chas. H. Lilly Co. Albany, Oregon | 1 | .. | .. | 1 | .. | .. | .. | .. | .. |
| Livingston Seed Co. Columbus, Ohio | .. | .. | .. | .. | .. | .. | 7 | .. | .. |
| Loft Pedigreed Seed Co. Jersey City, New Jersey | 3 | 1 | 3 | 2 | 2 | .. | .. | .. | .. |
| Ludlow Co-op Elevator Co. Ludlow, Illinois | 3 | .. | .. | .. | .. | .. | .. | .. | .. |
| J. C. McCullough Seed Co. Cincinnati, Ohio | .. | .. | .. | .. | .. | .. | 1 | .. | .. |
| Manderville-King Co. Rochester, New York | .. | .. | .. | .. | .. | .. | 5 | .. | .. |
| Mays Seed Co. Womelsdorf, Penna | 27 | .. | 1 | .. | .. | 1 | .. | .. | .. |
| Metropolitan Seed Corp. Fargo, North Dakota | .. | .. | .. | 1 | .. | .. | .. | .. | .. |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| Meyer Seed Co.<br>Baltimore, Maryland | .. | .. | .. | .. | .. | .. | 1 | .. | .. |
| W. J. Miller & Son<br>Farmdale, Ohio | 2 | .. | 1 | .. | .. | .. | .. | .. | .. |
| Mock Seed Co.<br>Pittsburgh, Penna. | 8 | .. | 1 | 7 | .. | .. | .. | .. | .. |
| New England Seed Co.<br>Providence, R. I. | .. | .. | .. | .. | .. | 1 | .. | .. | .. |
| Northampton County Seed Co.<br>Bath, Penna. | 6 | .. | .. | .. | .. | .. | .. | .. | .. |
| Northrup King & Co.<br>Minneapolis, Minnesota | 1 | .. | 1 | 1 | .. | .. | 20 | .. | .. |
| Ohio & Michigan Seed Co.<br>Green Springs, Ohio | .. | 1 | 1 | .. | .. | .. | .. | .. | .. |
| The Ohio Seed Co.<br>West Jefferson, Ohio | 67 | 5 | 6 | 3 | .. | .. | .. | .. | .. |
| J. C. Oliger Seed Co.<br>Akron, Ohio | 2 | 1 | 1 | .. | .. | .. | .. | .. | .. |
| Olney Seed Co.<br>Olney, Illinois | .. | .. | 1 | .. | .. | .. | .. | .. | .. |
| Ontario Seed Cleaners<br>Toronto, Canada | .. | 1 | .. | .. | .. | .. | .. | .. | .. |
| Pacific Grains, Inc.<br>Rickreall, Oregon | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Pacific Supply Cooperative<br>Madras, Oregon | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| The Page Seed Co.<br>Greene, New York | .. | .. | .. | .. | 2 | .. | 28 | .. | .. |
| Lee Patton Seed Co.<br>Jersey City, New Jersey | .. | .. | 1 | 1 | .. | .. | .. | .. | .. |
| Penn Fruit Co.<br>Philadelphia, Penna. | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Pennsylvania Farm Bureau<br>Manheim, Penna. | 135 | 1 | 3 | 9 | .. | .. | 1 | .. | .. |
| Peto Seed Co.<br>Saticoy, California | .. | .. | .. | .. | .. | .. | 2 | .. | .. |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| Pfister Association Growers, Inc. Walnut, Illinois | 2 | .. | .. | .. | .. | .. | .. | .. | .. |
| The Philadelphia Seed Co. Philadelphia, Pa. | 27 | 1 | 2 | 3 | .. | 3 | .. | .. | .. |
| J. M. Phillips Mercersburg, Penna. | .. | .. | .. | .. | .. | .. | 12 | .. | 2 |
| Pioneer Corn Co. Tipton, Indiana | 4 | .. | .. | .. | .. | .. | .. | .. | .. |
| Randolph Seed Co. East Randolph, New York | .. | .. | .. | .. | .. | .. | 11 | .. | .. |
| Reist Seed Co. Mt. Joy, Penna. | 22 | .. | .. | .. | .. | .. | .. | .. | .. |
| J. B. Rice, Jr., Inc. Shusham, New York | .. | .. | .. | .. | .. | .. | 7 | .. | .. |
| Rogers Bros. Seed Co. Idaho Falls, Idaho | .. | .. | .. | .. | .. | .. | 3 | .. | .. |
| P. L. Rohrer & Bro. Smoketown, Penna. | 29 | .. | 4 | .. | .. | .. | 9 | .. | .. |
| Round Butte Seed Growers, Inc. Oregon | .. | 1 | .. | .. | .. | .. | .. | .. | .. |
| Rudy-Patrick Seed Co. Kansas City, Missouri | 2 | .. | .. | .. | .. | 1 | .. | .. | .. |
| Willis Rupert & Sons New Waterford, Ohio | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Wm. G. Scarlett & Co. Baltimore, Maryland | 12 | 6 | .. | .. | 1 | .. | .. | .. | .. |
| Walter S. Schell, Inc. Harrisburg, Penna. | 3 | .. | .. | .. | 1 | .. | 58 | 4 | 3 |
| A. J. Schlessman & Son, Inc. Avery, Ohio | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Scotts Farm Seed Co. Mechanicsburg, Ohio | 2 | .. | .. | .. | .. | .. | .. | .. | .. |
| The I. W. Scott Co. Pittsburgh, Penna. | .. | .. | .. | 2 | .. | 2 | 12 | .. | .. |
| O. M. Scott & Son Marysville, Ohio | .. | .. | .. | 4 | 1 | .. | .. | .. | .. |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| Seaboard Seed Co. Philadelphia, Penna. | 93 | 3 | 6 | 9 | .. | .. | .. | .. | .. |
| Sears Roebuck & Co. Chicago, Illinois | .. | .. | .. | 1 | .. | 2 | 7 | 1 | .. |
| Seed Grower Ass'n. Tangent, Oregon | .. | .. | 1 | .. | .. | .. | .. | .. | .. |
| Seed Research Specialists, Inc. Modesto, California | .. | .. | .. | .. | .. | .. | 6 | .. | .. |
| Seems Seed Farms, Inc. Emmaus, Penna. | 25 | .. | .. | .. | .. | .. | .. | .. | .. |
| John M. Shawvan Co. Forest Park, Illinois | .. | .. | .. | .. | 1 | 1 | .. | .. | .. |
| Stanford Seed Co. Pittsburgh, Penna. | 49 | 1 | 5 | 1 | .. | .. | .. | .. | .. |
| Steiman, Inc. Fort Wayne, Indiana | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Strever Seed & Grain Co. Waterman, Illinois | 2 | .. | .. | .. | .. | .. | .. | .. | .. |
| L. Teweles Seed Co. Milwaukee, Wisconsin | .. | .. | .. | 1 | .. | 1 | .. | .. | .. |
| Todd Hybrid Corn Co. Burlington, Indiana | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Tri-State Seed Co. Philadelphia, Penna. | .. | .. | .. | .. | .. | .. | 14 | .. | .. |
| Turf Research, Inc. Grant Park, Illinois | .. | .. | .. | 1 | .. | .. | .. | .. | .. |
| Uncle George's Seed Farm Monsey, New York | .. | .. | .. | .. | .. | 1 | .. | .. | .. |
| United Seeds, Inc. Omaha, Nebraska | .. | .. | .. | .. | 1 | 1 | .. | .. | .. |
| Vaughan's Seeds Chicago, Illinois | .. | .. | .. | 1 | 1 | .. | 6 | .. | .. |
| Vollstedt's, Inc. Albany, Oregon | 1 | .. | .. | .. | .. | .. | .. | .. | .. |
| Western Auto Supply Co. Kansas City, Missouri | .. | .. | .. | 1 | .. | .. | .. | .. | .. |

# TABLE IV

## Summary, by Wholesalers, of Total Numbers of Official Samples Tested in the Seed Laboratory

| WHOLESALE DISTRIBUTORS | Agricultural | | | Mixtures | | | Vegetables | | |
|---|---|---|---|---|---|---|---|---|---|
| | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations | Correctly Labeled | Serious Violations | Technical Violations |
| White Rose Seed & Nursery Co. York, Penna. | .. | .. | .. | .. | .. | .. | 33 | .. | 3 |
| Whitney Seed Co. Buffalo, New York | .. | .. | .. | 2 | .. | .. | .. | .. | .. |
| Wilkins Seed Grains, Inc. Pontiac, Illinois | 9 | .. | .. | .. | .. | .. | .. | .. | .. |
| Woodruff Triple "T" Seed Co. Wethersfield, Connecticut | .. | .. | .. | .. | .. | .. | 1 | .. | .. |
| TOTALS | 1053 | 48 | 75 | 96 | 24 | 32 | 632 | 19 | 14 |

# TABLE V

## Quality of Pennsylvania Grown Alfalfa, Red Clover and Timothy Seed

During the past year the number of home grown timothy and red clover samples received by the Seed Laboratory declined 60% from the previous year. This was probably due to farmers cutting all their fields for hay to compensate for two years of drought conditions. A third category, alfalfa, has been added to this table. Apparently more farmers are harvesting home grown alfalfa seed for their own use, as well as to be offered for sale.

This table gives some indication of the quality of seed that Pennsylvania Farmers are growing. Many of the lots of seed considered illegal in this table could have been made legal for sale with proper cleaning. Some of these lots of seed were recleaned and made legal for sale. Although a lot of seed may be legal for sale, it could still be unfit for planting; for example, several farmers had seed with over one percent weed seeds, this is approximately 7000 weed seeds per pound. One sample of illegal timothy seed contained over twelve percent weed seeds, or approximately 84,000 weed seeds per pound.

The percentage of illegal samples of red clover and timothy declined from last year, but the number of illegal alfalfa samples is rather high.

**% of Seed Illegal For Sale**

| | 1963 | 1962 | 1961 |
|---|---|---|---|
| Alfalfa | 40.0 | -- | -- |
| Red Clover | 28.8 | 36.4 | 26.2 |
| Timothy | 17.4 | 18.5 | 18.5 |

If farmers must plant home grown seed, they must learn the value of weed free quality seed. It is not necessary for farmers to plant home grown seed with high numbers of noxious weed seeds present. It pays to have home grown seed properly cleaned and laboratory tested. Better yet, it pays to plant certified seed.

| | Number of Samples | Av. Purity Analysis | Purity High - Low | Noxious Weed Seeds Per Ounce Average | Noxious Weed Seeds Per Ounce High - Low |
|---|---|---|---|---|---|
| | | | **Alfalfa** | | |
| Legal | 6 | 98.76 | 99.6 - 97.9 | 12 | 28 - 0 |
| Illegal | 4 | * | * | 73.5 | 131 - 31 |
| | | | **Red Clover** | | |
| Legal | 42 | 98.79 | 99.9 - 91.9 | 8.4 | 26 - 0 |
| Illegal | 17 | * | * | 208.7 | 1197 - 29 |
| | | | **Timothy** | | |
| Legal | 19 | 99.48 | 99.9 - 97.0 | 3.4 | 20 - 0 |
| Illegal | 4 | * | * | 37.3 | 46 - 31 |

*Samples not analyzed for purity.

# TABLE VI

## Drill Box Survey

The 1963 Drill Box Survey was conducted in seven counties covering oats and a few samples of red clover and timothy. A few odd crops and mixtures are not included in this table. The Snyder county survey is part of a research project conducted by a graduate student at the Pennsylvania State University.

This survey shows an over-all average of only 58 per cent of these samples would have been legal for sale. In 1962, 46 per cent were legal for sale and 66 per cent in 1961. The trend seems to be on an upward trend but many farmers are still planting poor quality seed. 76 per cent of the farmers who planted oats are using treated seed and 88 per cent are using seed of known variety. Unfortunately only 60 per cent of the farmers who planted oats recognize the value of using certified seed.

It pays to buy and plant Pennsylvania Certified Seed!

| Kind | Number of Samples | % Cleaned | % Certified | Purity High Low | Germ. High Low | % Legal For Sale |
|---|---|---|---|---|---|---|
| | | | Armstrong County | | | |
| Oats | 28 | 96 | 7 | 99.9 - 97.4 | 99 - 78 | 75 |
| Red Clover | 2 | 100 | 0 | 97.7 - 95.4 | 90 - 82* | 50 |
| | | | Crawford County | | | |
| Oats | 3 | 100 | 67 | 99.98 - 99.92 | 98 - 28 | 0 |
| | | | Erie County | | | |
| Oats | 45 | 80 | 18 | 99.9 - 96.6 | 99 - 10 | 36 |
| | | | Indiana County | | | |
| Oats | 1 | 100 | 0 | 99.7 | 99 | 100 |
| Red Clover | 1 | 100 | 0 | 93.9 | 97 * | 0 |
| Timothy | 1 | 100 | 0 | 95.6 | 23 | 0 |
| | | | Lancaster County | | | |
| Oats | 11 | 100 | 64 | 99.9 - 95.1 | 99 - 93 | 100 |
| Red Clover | 2 | 100 | 50 | 99.8 - 99.6 | 96 - 93* | 50 |
| Timothy | 2 | 100 | 50 | 99.8 - 99.7 | 85 - 80 | 100 |
| | | | Snyder County | | | |
| Oats | 23 | ... | | 99.7 - 92.3 | 99 - 67 | 83 |
| | | | Susquehanna County | | | |
| Oats | 9 | 89 | 33 | 99.9 - 98.5 | 98 - 84 | 56 |
| | | | Warren County | | | |
| Oats | 8 | 88 | 25 | 99.9 - 96.8 | 99 - 74 | 25 |

*Total germination and hard seed.

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